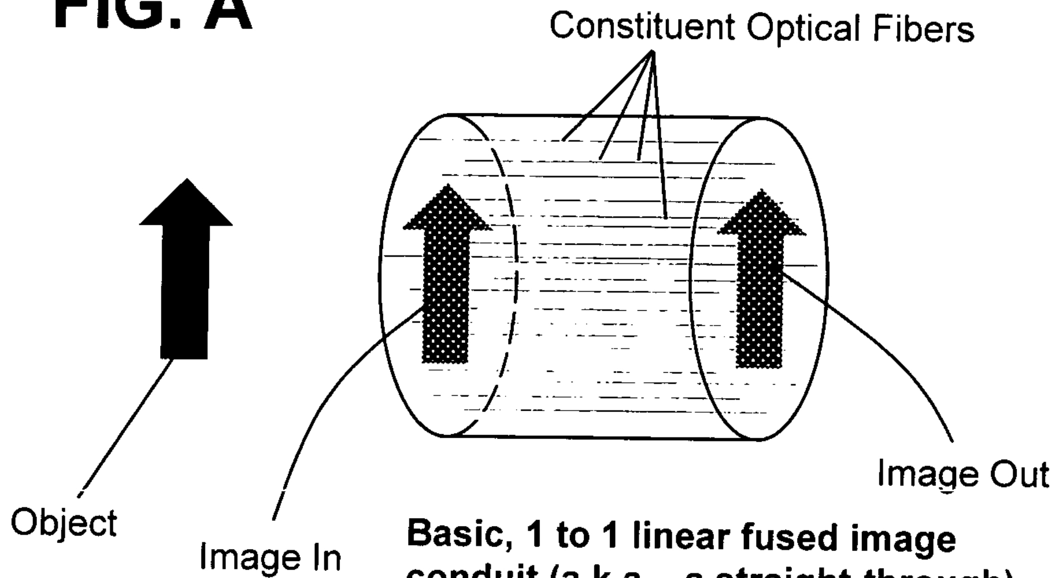
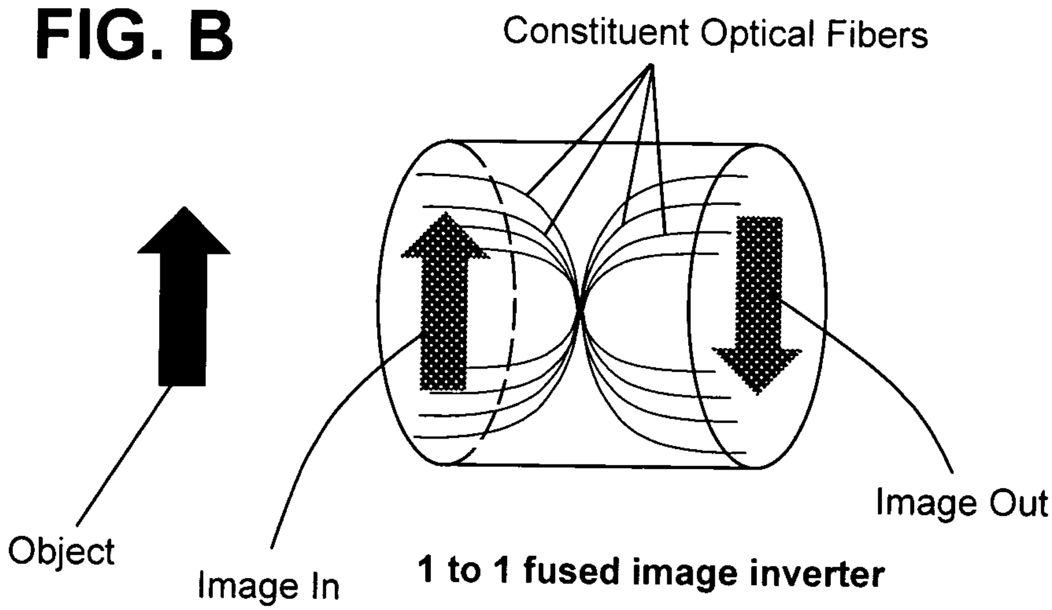
FIG. A



Basic, 1 to 1 linear fused image conduit (a.k.a., a straight-through)

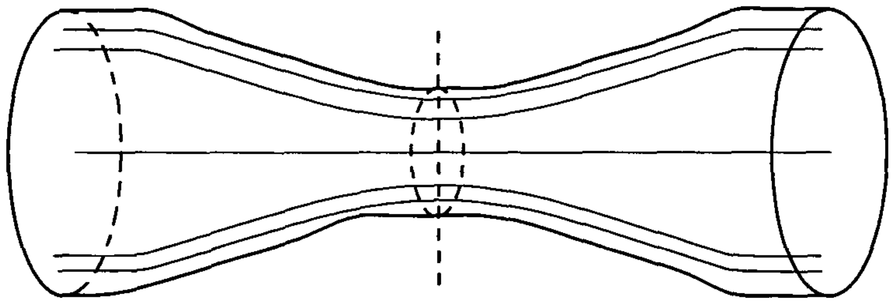
(Background Art)

FIG. B



1 to 1 fused image inverter

(Background Art)



Fused Bundle is heated and Stretched to Produce Reducer and/or Magnifier

FIG. C1

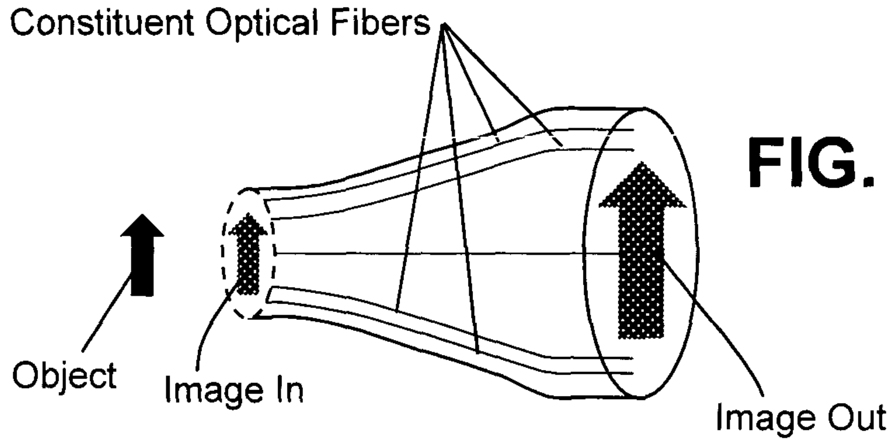
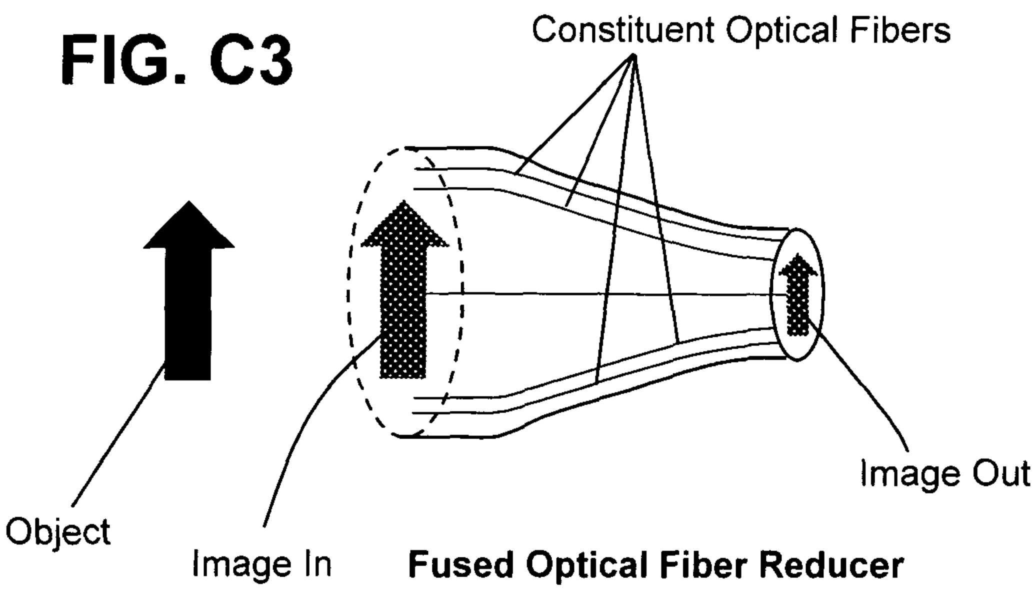


FIG. C2

Fused Optical Fiber Enlarger/Magnifier

(Background Art)

FIG. C3



Fused Optical Fiber Reducer

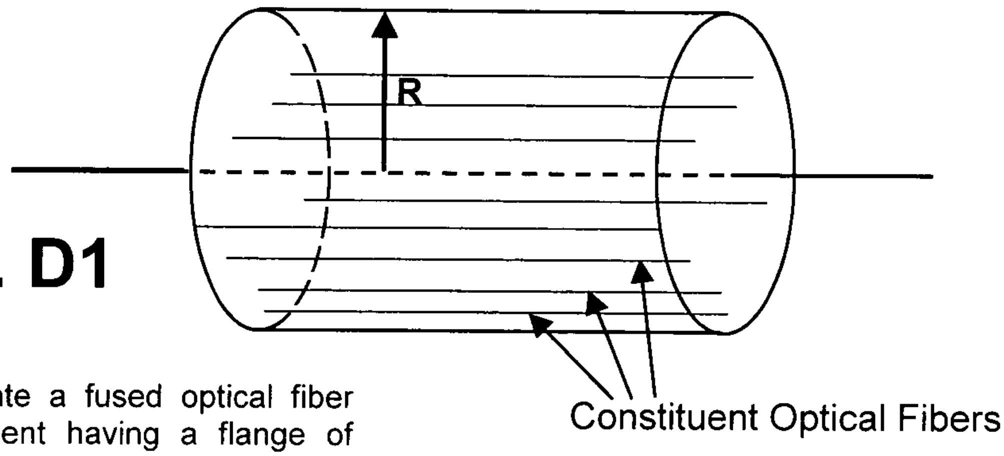
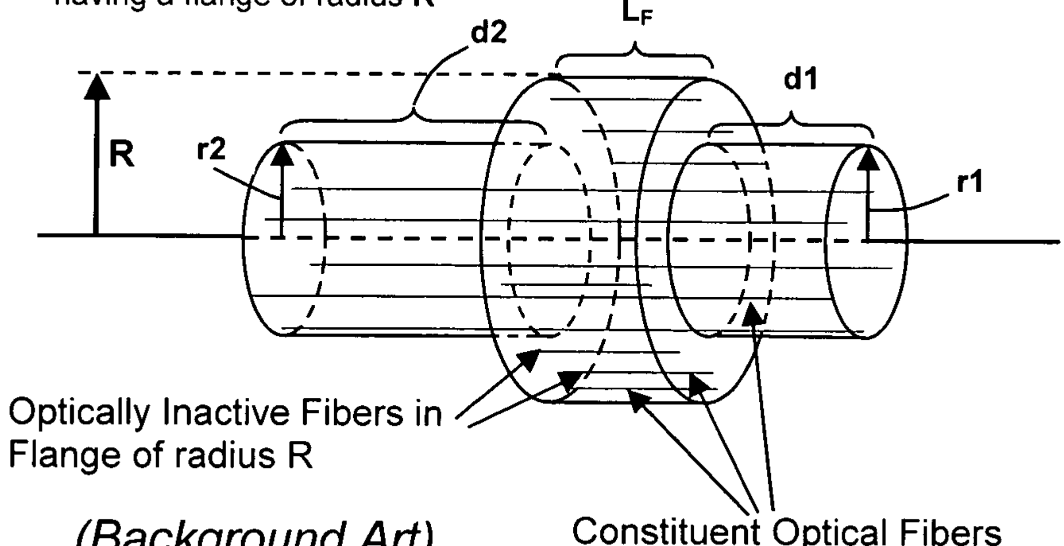


FIG. D1

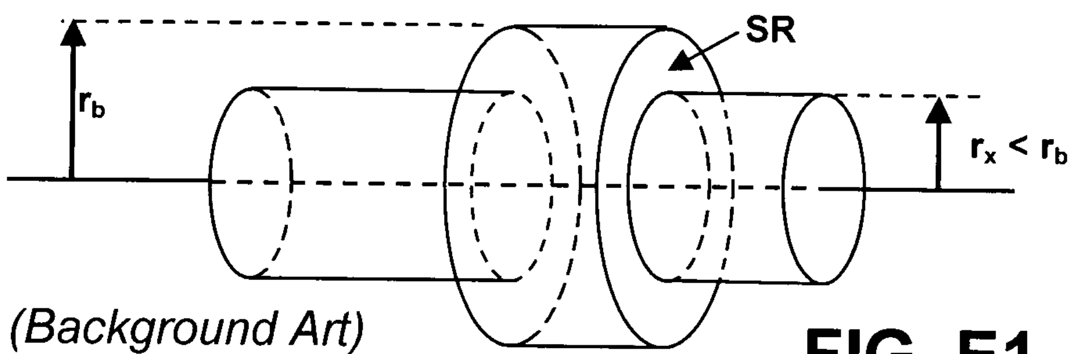
To create a fused optical fiber component having a flange of radius **R**, a typical method of the prior art calls for the preliminary fabrication of a fused billet of radius **R̄**

To fused billet of radius **R** is then ground (e.g., by CNC machinery) down to the desired shape to create the component having a flange of radius **R**

FIG. D2



(Background Art)



(Background Art)

FIG. E1

To create a fused optical fiber component having a flange of radius **R**, a previously-implemented alternative method calls for the preliminary fabrication of a fused billet of radius $\mathbf{r_b}$, where $\mathbf{r_b} <$ **R**. A portion of the billet is then ground to define a shoulder region SR joining a region of radius $\mathbf{r_b}$ with a region having a radius $\mathbf{r_x} <$ $\mathbf{r_b}$.

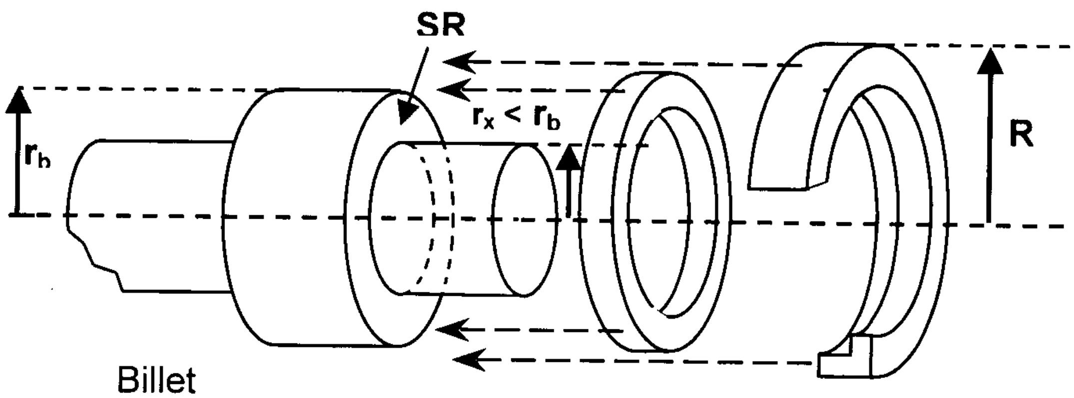


FIG. E2

(Background Art)

A frit ring is then placed in resting engagement with and over the shoulder region **SR**. A metal ring or sleeve is urged into contacting engagement with the frit ring. The assembly is then heated until the frit ring softens and fuses with the billet and the metal ring/sleeve.

Fused Optical Fiber Image Conduit

FIG. 1

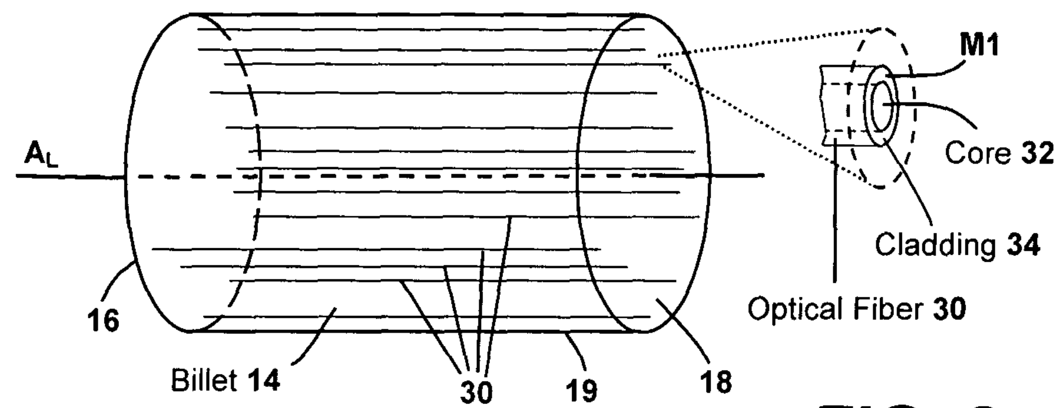


FIG. 2

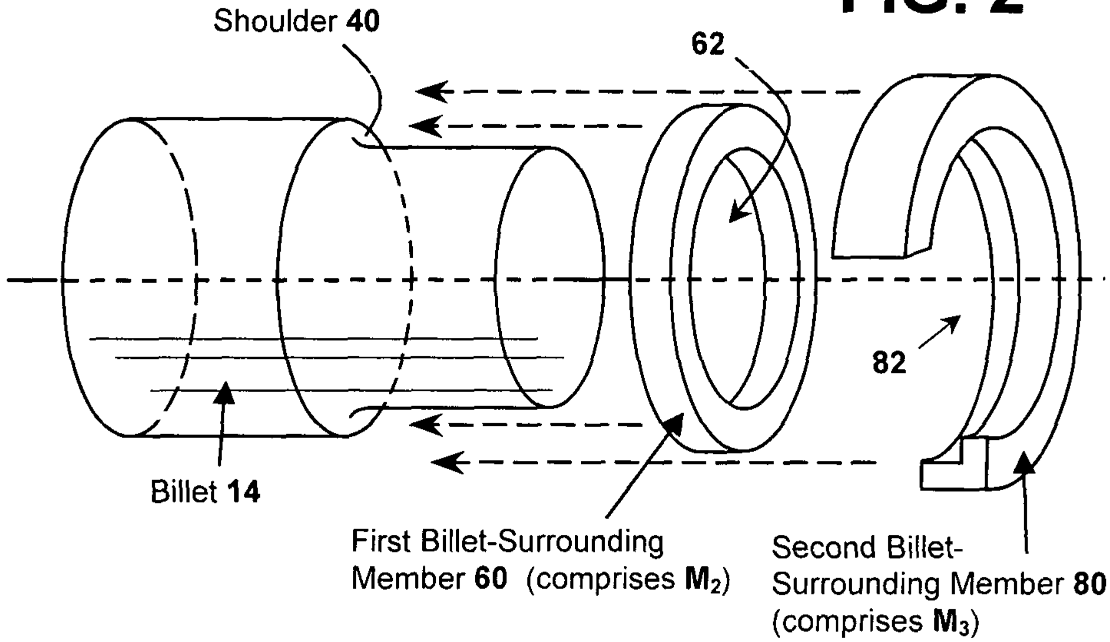
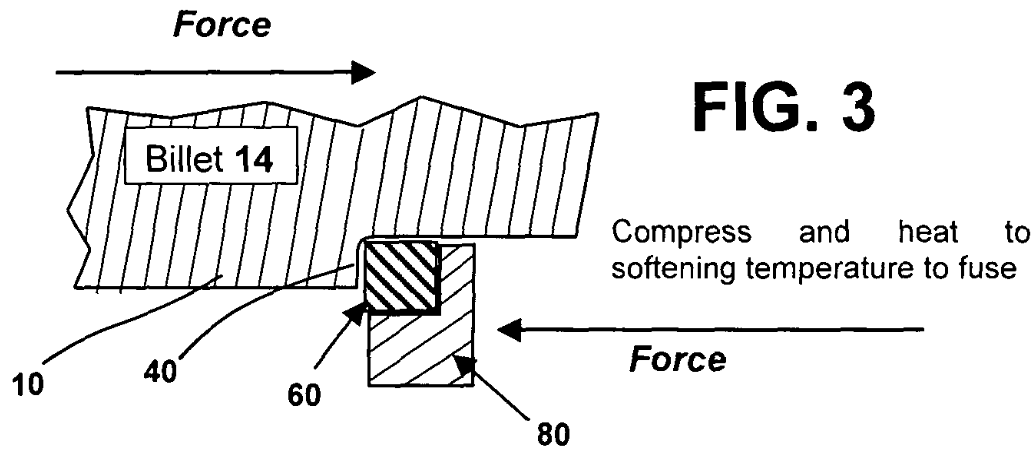


FIG. 3



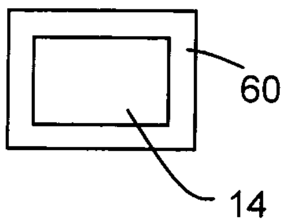


FIG. 4A

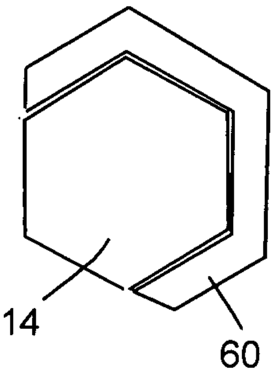
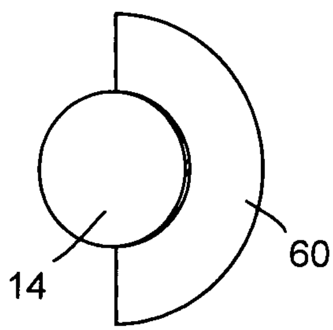


FIG. 4B

FIG. 4C



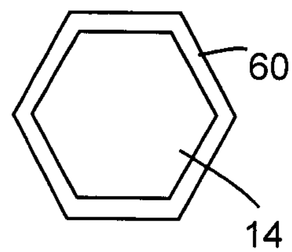


FIG. 4D

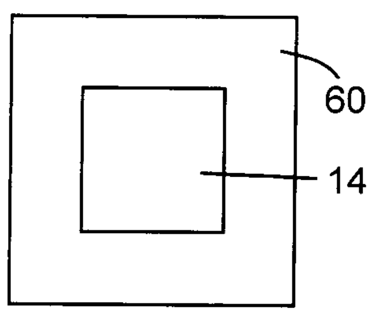


FIG. 4E

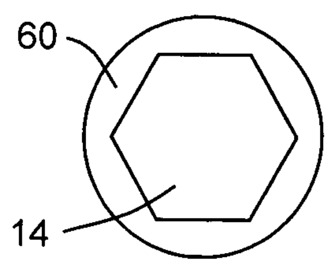


FIG. 4F

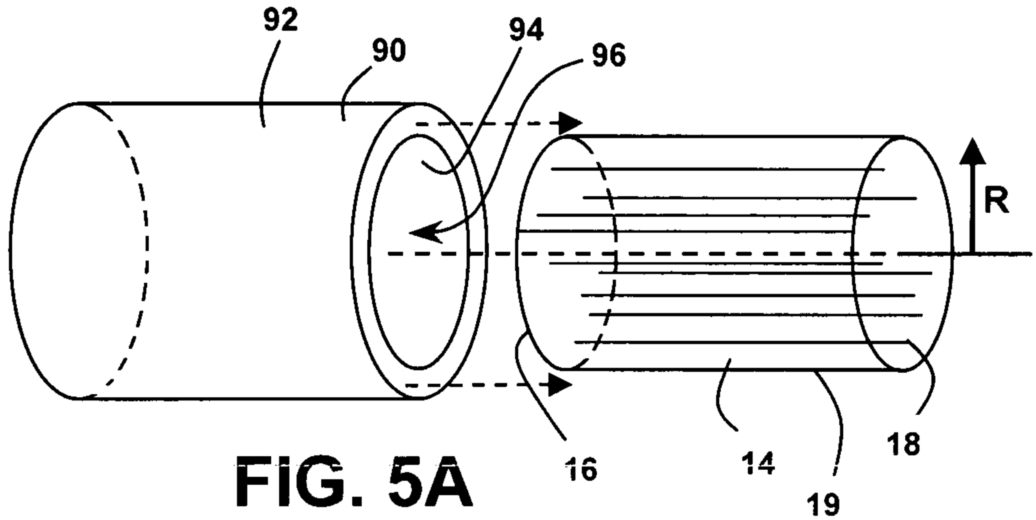


FIG. 5A

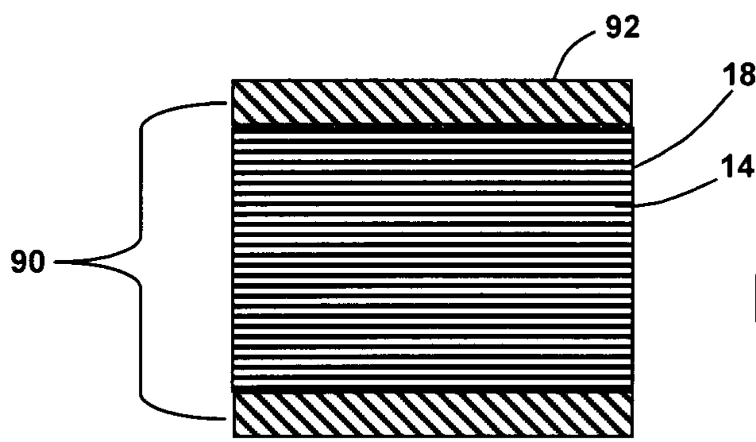


FIG. 5B

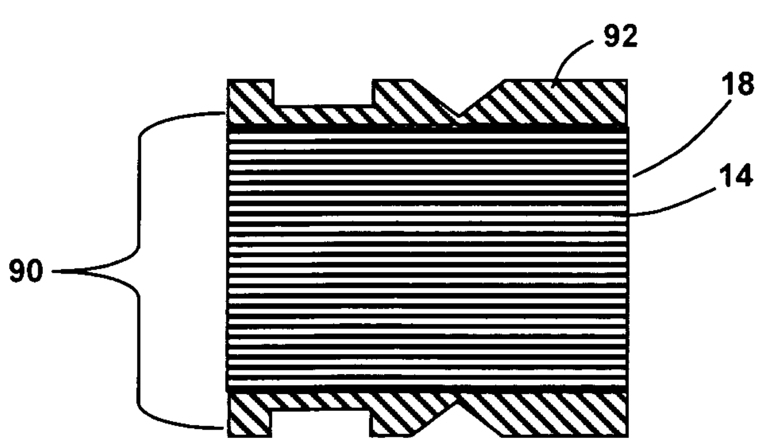


FIG. 5C